ELSEVIER

Journal of Organometallic Chemistry 643–644 (2002) 525–526

Journal of Organometallic Chemistry

www.elsevier.com/locate/jorganchem

Author Index of Volume 643–644

Akiba, K.-y., 441
Alijah, A., 223
Amatore, C., 416
Andrieu, B., 27
Asahara, M., 479
Astruc, D., 125
Avarvari, N., 292, 301

Baba, G., 342
Bachrach, S.M., 39
Balavoine, G.G.A., 19
Baldwin, R., 461
Ballesteros, A., 363
Balueva, A., 112
Barluenga, J., 363
Barron, A.R., 53
Bartsch, R., 68
Batail, P., 301
Battioni, P., 522
Benincori, T., 424
Bergsträßer, U., 409
Bezombes, J.-P., 453
Bode, M., 253
Bolze, F., 89
Bott, S.G., 53
Boubekeur, K., 301
Bourgeois, D., 247
Breuzard, J., 98
Brunet, J.-J., 27
Buono, G., 237

Cai, X., 272
Caminade, A.-M., 112
Cámpora, J., 331
Carmona, E., 331
Casanove, M.-J., 307
Castillo, I., 431
Celentano, G., 424
Cendrowski-Guillaume, S.M., 209
Chaudret, B., 307
Chuit, C., 453
Chuluunbaatar, T., 32
Constantieux, T., 237
Corriu, R.R.J., 453
Coulombeau, A., 381
Cowley, A.H., 487
Cristau, H.-J., 381

Dąbkowski, W., 490
Dajka, B., 32
Dallemer, F., 19
Danner, S., 409
Daran, J.-C., 19
Deborde, V., 494
De Cian, A., 376
Delaere, D., 194
Delouvrié, B., 130
Denis, J.-M., 342
Deprèle, S., 154
Diallo, O., 27
Donnadieu, B., 27
Don Tilley, T., 431
Döring, S., 61
Drago, D., 214
Driess, M., 468
Drouin, M., 89
Duboc, R., 512
Dybowski, P., 501

Ehlers, A.W., 369
Endres, A., 174
Ephritikhine, M., 209
Erker, G., 61
Escudié, J., 202
Espinosa, E., 89

Fekete, Á., 278
Fensterbank, L., 130
Fourmigué, M., 292
Franke, F., 468
Freytag, M., 68
Frison, G., 105, 285
Fröhlich, R., 61
Fukuda, T., 508

Gabbaï, F.P., 164
Gehrhus, B., 272
Geldbach, T.J., 214
Genêt, J.-P., 512
Genevois-Borella, A., 381
Gorden, J.D., 487
Gornitzka, H., 202
Goumans, T.P.M., 369
Gouygou, M., 19
Grigoleit, S., 223
Gros, C.P., 89
Grützmacher, H., 285
Gudat, D., 181
Guerchais, V., 498
Gugger, P.A., 136
Guilard, R., 89

Häp, S., 181
Hardman, N.J., 461
Harouch, Y.E., 202
Harvey, P.D., 89
Hay, C., 494
Heath, G.A., 136
Heinemann, F.W., 357
Heydt, H., 409
Hino, S., 461
Hissler, M., 494
Hitchcock, P.B., 272
Hofmann, M., 357
Hosseini, M.W., 376
Hydrio, J., 19

Ionescu, E., 253
Ito, Y., 508

Jaouen, G., 350
Jones, P.G., 68, 253
Juillard, A., 522
Jullien, V., 376
Jutand, A., 416

Kalam-Alami, M., 125
Kalck, P., 12
Kaloun, E.B., 350
Karaçar, A., 68
Kauzlarich, S.M., 461
Kawachi, A., 479
Kawashima, T., 504
Kaźmierczak, Ł., 490
Kee, T.P., 516
Keglevich, G., 32
Kégl, T., 32
Kiran, B., 265
Koenig, M., 324
Kojima, S., 441
Kollár, L., 32

Lacour, J., 392
Lammertsma, K., 369
Laïos, I., 350
Lappert, M.F., 272
Le Bozec, H., 498
Leclercq, G., 350
Leduc, P., 522
Le Floch, P., 1
Le Gendre, P., 231
Le Guyader, F., 98
Lemaire, M., 98
Lenoble, G., 12
Lesvier, M., 342
Leung, P.-H., 4
Lienafa, J., 27
Liu, X., 4
Londez, A., 392
Lönnecke, P., 81
López, J.A., 331
Ludányi, K., 32

PII: S0022-328X(02)01161-0

Maas, G., 174
Macdonald, C.L.B., 487
Maciągiewicz, I., 501
Mack, A., 409
Magull, J., 47
Maisonnat, A., 307
Majoral, J.-P., 112
Malacria, M., 130
Mansuy, D., 522
Manuel, G., 324
Martin, D., 292
Martinez, V., 125
Matsukawa, S., 441
Maya, C., 331
Merino, S., 112
Michalski, J., 490
Mitzel, N.W., 313
Montchamp, J.-L., 154
Moreira, G., 324
Moïse, C., 231
Moulines, F., 125

Naganuma, K., 504
Nájera, F., 130
Nakamoto, M., 441
Nayral, C., 307
Neculai, A.M., 47
Neculai, D., 47
Nelson, J.H., 136
Neumann, B., 81
Neumann, C., 253
Ngono, C.J., 237
Nguyen, M.T., 194, 265
Nieger, M., 181
Nierlich, M., 209
Nogai, S., 313
Nolan, S.P., 247
Noltemeyer, M., 47
Nöth, H., 189
Nyulászi, L., 278

Oba, G., 324
Obrey, S.J., 53
Ong, T.K.W., 4

Palacio, M., 522
Palma, P., 331
Pancrazi, A., 247
Parlagh, G., 32
Pellet-Rostaing, S., 98
Perruchas, S., 301
Picquet, M., 231
Piotrowski, H., 189
Pirat, J.-L., 381
Planeix, J.-M., 376
Power, P.P., 461
Pregosin, P.S., 214
Pritzkow, H., 468
Prunet, J., 247
Pumpenmeier, L., 81

Quiclet-Sire, B., 404

Radaelli, S., 424
Ranaivonjatovo, H., 202
Rataboul, F., 307
Réau, R., 494
Regitz, M., 409
Renard, S.L., 516
Reyé, C., 453
Richard, P., 231
Rickard, C.E.F., 168
Roblou, E., 27
Roesky, H.W., 47
Roper, W.R., 168
Rozhenko, A.B., 223
Ruthe, F., 253

Sada, M., 424
Saluzzo, C., 98
Sanchez, F., 381
Sannicolò, F., 424
Santamaría, J., 363
Sauthier, M., 494
Savignac, M., 512
Schiemann, U., 253
Schiemenz, B., 461
Schier, A., 313
Schlenker, M., 253
Schmidbaur, H., 313
Schmidt, H.-G., 47
Schmutzler, R., 68
Schneiderbauer, S., 189
Schoeller, W.W., 223
Schulte, M., 164
Selvaratnam, S., 4
Sevin, A., 105
Simon, F., 301
Skowrońska, A., 501
Slootweg, J.C., 272
Stammler, H.G., 81
Stender, M., 461
Strand, S.J., 369
Streubel, R., 223, 253
Suginome, M., 508
Suter, M., 189

Tamao, K., 479
Tea, C.G., 342
Thönnessen, H., 68
Thuilliez, A., 416
Tőke, L., 32
Tomás, M., 363
Top, S., 350
Toshimitsu, A., 479
Toupet, L., 494, 498
Touré, S.A., 342
Twamley, B., 461
Tworowska, I., 490

Ulrich, K., 498
Uriel, S., 301
Urrutigoïty, M., 12

Valerga, P., 331
Vallet, M., 98
Vanquickenborne, L.G., 194
Vessières, A., 350
Vittal, J.J., 4
Vlaar, M.J.M., 369

Weber, L., 81
Webster, R.D., 136
Westerhausen, M., 189
White, A.J.P., 4
Wild, S.B., 136
Williams, D.J., 4
Willis, A.C., 136
Wilton-Ely, J.D.E.T., 313
Woodgate, S.D., 168
Wright, L.J., 168

Yamamoto, Y., 441

Zard, S.Z., 404
Zenneck, U., 357
Zhang, H., 404

ELSEVIER

Journal of Organometallic Chemistry 643–644 (2002) 527–535

Journal of Organometallic Chemistry

www.elsevier.com/locate/jorganchem

Subject Index of Volume 643–644

Ab initio calculations
Phosphorus stabilized carbenes: theoretical predictions, 278
Structure–property relationships in phosphole oligomers: a theoretical insight, 194
Acid hydrolysis
Palladium(II) ion promoted hydroamination of di(phenylethynyl)-phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, 4
Acrylates
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of $[PPN]^+[CH_3CH(COOEt)\text{-}Cr(CO)_5]^-$, 27
1,2-Adduct
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of $[PPN]^+[CH_3CH(COOEt)\text{-}Cr(CO)_5]^-$, 27
Alkaline earth metal bis(2-phosphaethynolates)
Synthesis of alkaline earth metal bis(2-phosphaethynolates), 189
Alkoxysilane
A novel and convenient preparation of hypophosphite esters, 154
Alkyl
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, 331
Alkyl–chromium bonds
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of $[PPN]^+[CH_3CH(COOEt)\text{-}Cr(CO)_5]^-$, 27
Alkyl hypophosphite
A novel and convenient preparation of hypophosphite esters, 154
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, 381
Alkyls
The stable silylene $Si[(NCH_2^tBu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[LiSi(SiMe_3)_3(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], 272
Allenylidenes
Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, 231
Allyl silanes
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, 324
Aluminium complex
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, 53
Amination
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, 125
Aminoalkylphosphinic acids
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, 381
(Amino)(boryl)carbene
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)-iminomethanes via possible generation of (amino)(boryl)-carbene species, 508
Aminocarbene complexes
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, 105
Amino-functionalised silyl anions
The stable silylene $Si[(NCH_2^tBu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[LiSi(SiMe_3)_3(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], 272
Aminophosphine
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, 98
Aminophosphite
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, 98
4-Amino-2-pyrimidine-thiol
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, 313
Anti-aromatic
Synthesis and structure of a highly fluorinated 7-bora-7*H*-benzo[*de*]anthracene, 164
Antimony
Synthesis, structure and reactivity of highly functionalized arsanyl- and stibanyl-diazomethanes, 81
Apicophilicity
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), 441
Aromaticity
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, 105
Arsanide
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = $1,2\text{-}(Ph_2P)_2C_2H_4$), 468
Arsenic
Synthesis, structure and reactivity of highly functionalized arsanyl- and stibanyl-diazomethanes, 81
Aryloxide
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, 331
Arylphospholes
Site-selective phosphorylation of arylphospholes through reaction with phosphorus tribromide, 32
A(1,3) strain
Diastereoselective synthesis of C_2-symmetric hexacoordinated phosphate anions (HYPHATs) with predetermined chirality from 1,2-diaryl-ethane-1,2-diols, 392
Asymmetric catalysis
Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, 424
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, 98

PII: S0022-328X(02)01162-2

Asymmetric induction
Diastereoselective synthesis of C_2-symmetric hexacoordinated phosphate anions (HYPHATs) with predetermined chirality from 1,2-diaryl-ethane-1,2-diols, 392
Asymmetric synthesis
Reactivity of the lithium anion of the (*S*,*S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, 130
Aurophilicity
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, 313
Azaboretidine
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)-iminomethanes via possible generation of (amino)(boryl)-carbene species, 508
Azaphospha heterocycle
Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, 4
Azaphosphirane
Structural properties of azaphosphirane and its $W(CO)_5$ complex. A density functional study, 369
Azaphosphirene complexes
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, 253

Benzophospholides
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, 181
Bicyclo[3.2.0]hept-1(7) ene
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, 324
Bidentate P–O ligands
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, 237
Bioorganometallic
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, 350
Bond activation
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = 1,2-$(Ph_2P)_2C_2H_4$), 468
Bond alternation
Aromaticity of annulated benzene, pyridine and phosphabenzene, 39
η^1-π-bonding
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile, isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, 214
Bonding analysis
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, 105
Bonding concepts
Coordinated olefins, H_2C=CHR, and phosphanes, PH_2R: a theoretical study of the R substituent effect, 285
Borane
Synthesis of dendrimers with phosphine end groups at each generation, 112
Borohydride
Synthesis and structure of monomeric and solvent-free $LPrX_2$ compounds supported by a new β-diketiminato ligand [L = $Et_2NCH_2CH_2NC(Me)CHC(Me)NCH_2CH_2NEt_2$, X = Cl, Br, BH_4], 47
The first mixed cyclooctatetraenyl-phospholyl metal complexes. Crystal structure of $[U(\eta\text{-}C_8H_8)(\eta\text{-}C_4Me_4P)(BH_4)(OC_4H_8)]$, 209
Boron
Synthesis and structure of a highly fluorinated 7-bora-7*H*-benzo[*de*]anthracene, 164
Bridging ligand
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, 494
Convenient access to an alkenyl(biscarbene)-bridged heterobinuclear (Ru–W) complex. X-ray structure of $[(\eta^6\text{-}C_6Me_4H_2)Ru{=}C(OMe)(CH{=}CHC_6H_4CH{=}CH\text{–}CO_2Me)(Cl)(PMe_3)][PF_6]$, 498
Bridging nitrogen-containing ligands
Synthesis of dimetallic μ-alkylideneamido zirconocene dications by a thermodynamically favorable lithium chloride elimination pathway, 61
Brook rearrangement
Synthesis and structure of the first pentacoordinate thiasiliranides, 504
Bulky groups
Unusual structures of lithium terphenyl derivatives, 461
Bulky phosphines
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, 68

Calcium complexes
A series of soluble, discrete homo and heteroleptic Ca(II) complexes of hexanuclear sulfidochloride rhenium clusters, $[Ca(X)_n(Y)_m][Re_6S_6Cl_8]$, ($n = 6$, $m = 0$, X = DMF, THF, DMSO; $n = 4$, $m = 3$, X = MeCN, Y = THF, dioxane) and the 1D co-ordination polymer $[Ca(MeCN)_3(OH_2)_2(dioxane)_2][Re_6S_6Cl_8]\cdot(dioxane)(MeCN)$, 301
Carbanions
Reactivity of the lithium anion of the (*S*,*S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, 130
Carbene
The $Cl_2(PCy_3)(IMes)Ru(=CHPh)$ catalyst: olefin metathesis versus olefin isomerization, 247
Carbene complex
Convenient access to an alkenyl(biscarbene)-bridged heterobinuclear (Ru–W) complex. X-ray structure of $[(\eta^6\text{-}C_6Me_4H_2)Ru{=}C(OMe)(CH{=}CHC_6H_4CH{=}CH\text{–}CO_2Me)(Cl)(PMe_3)][PF_6]$, 498
The unusual reaction of $Ga(C_5Me_5)_3$ with a nucleophilic carbene, 487
Carbene complexes
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, 253
Carbonylation
Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, 12
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, 331
CDA analyses
Coordinated olefins, H_2C=CHR, and phosphanes, PH_2R: a theoretical study of the R substituent effect, 285
C–H activation
Unusual structures of lithium terphenyl derivatives, 461
Chiral
Electronic effects on the acidity of phosphorus(III) triflates, 516

Chiral diphosphines
Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, 424
Chloloarene
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, 125
^{13}C NMR
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile, isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, 214
Complexes
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, 19
Condensation
Reactivity of the lithium anion of the (*S*,*S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, 130
Conjugated dieneynes
A general convenient synthesis of conjugated dieneynes, 501
π-Conjugated system
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, 494
π-Conjugation
Structure–property relationships in phosphole oligomers: a theoretical insight, 194
[4 + 2]-Coordinate silicon compound
Synthesis, structure, and reactivity of disilanes containing one neutral [4 + 2]-coordinate silicon center, 479
Co-ordination polymer
A series of soluble, discrete homo and heteroleptic Ca(II) complexes of hexanuclear sulfidochloride rhenium clusters, $[Ca(X)_n(Y)_m][Re_6S_6Cl_8]$, ($n = 6$, $m = 0$, X = DMF, THF, DMSO; $n = 4$, $m = 3$, X = MeCN, Y = THF, dioxane) and the 1D co-ordination polymer $[Ca(MeCN)_3(OH_2)_2$-$(dioxane)_2][Re_6S_6Cl_8]\cdot(dioxane)(MeCN)$, 301
Copper complexes
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, 53
Cross-coupling
Palladium cross-coupling reactions on solid support using a new silylated linker, 512
Cross-coupling reaction
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, 98
Crystal structures
A series of soluble, discrete homo and heteroleptic Ca(II) complexes of hexanuclear sulfidochloride rhenium clusters, $[Ca(X)_n(Y)_m][Re_6S_6Cl_8]$, ($n = 6$, $m = 0$, X = DMF, THF, DMSO; $n = 4$, $m = 3$, X = MeCN, Y = THF, dioxane) and the 1D co-ordination polymer $[Ca(MeCN)_3(OH_2)_2$-$(dioxane)_2][Re_6S_6Cl_8]\cdot(dioxane)(MeCN)$, 301
Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, 4
Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)-tetrathiafulvalenes, 292
C_2 symmetry ligands
Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, 424
[2 + 2] Cycloadditions
The first stable 3,1-germaphosphaallene Tip(*t*-Bu)Ge=C=PAr, 202
Cycloadditions
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, 409
Cyclo and spirozirconation
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, 324
Cycloaromatization
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, 342
Cyclooctatetraenyl
The first mixed cyclooctatetraenyl-phospholyl metal complexes. Crystal structure of $[U(\eta\text{-}C_8H_8)(\eta\text{-}C_4Me_4P)(BH_4)(OC_4H_8)]$, 209
Cyclopentanones
A facile and diastereoselective access to substituted cyclopentanones from Fischer alkenyl carbene complexes and 1-amino-1-azadienes, 363

dba
Mechanism of the oxidative addition of Pd^0 complexes generated from $Pd^0(dba)_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, 416
Delocalization
Synthesis of alkaline earth metal bis(2-phosphaethynolates), 189
Dendrimers
Synthesis of dendrimers with phosphine end groups at each generation, 112
Density functional calculations
Donor–acceptor interactions with electrophilic terminal phosphinidene complexes, 223
Density functional studies
Density functional studies on N-fused porphyrin. Electronic, magnetic and metal binding properties, 265
Density functional theory (DFT) calculation
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, 105
DFT calculations
Coordinated olefins, H_2C=CHR, and phosphanes, PH_2R: a theoretical study of the R substituent effect, 285
Diastereoselectivity
Reactivity of the lithium anion of the (*S*,*S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, 130
Diazaphospholes
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, 253
Diazoalkanes
Synthesis, structure and reactivity of highly functionalized arsanyl- and stibanyl-diazomethanes, 81
Diazo compounds
New highly fluorinated dirhodium(II) tetrakis(alkanecarboxylates) as catalysts for carbenoid C–H insertion reactions, 174
[4 + 2]-Diels–Alder cycloaddition
Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, 136
1-Diisopropylaminophosphole
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, 19
β-Diketiminato ligand
Synthesis and structure of monomeric and solvent-free $LPrX_2$ compounds supported by a new β-diketiminato ligand [L = $Et_2NCH_2CH_2NC(Me)CHC(Me)NCH_2CH_2NEt_2$, X = Cl, Br, BH_4], 47
Dimerization
Synthesis of dimetallic μ-alkylideneamido zirconocene dications by a thermodynamically favorable lithium chloride elimination pathway, 61

8-Dimethylamino-1-naphthyl group
Synthesis, structure, and reactivity of disilanes containing one neutral [4 + 2]-coordinate silicon center, 479
Diphosphabenzvalenes
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, 409
1,3-Diphosphacyclobutadienes
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, 409
1,3-Diphospha-Dewar-benzenes
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, 409
Disilane
Synthesis, structure, and reactivity of disilanes containing one neutral [4 + 2]-coordinate silicon center, 479
Donor–acceptor interactions
Donor–acceptor interactions with electrophilic terminal phosphinidene complexes, 223
Doubly-bonded derivatives of germanium and phosphorus
The first stable 3,1-germaphosphaallene Tip(*t*-Bu)Ge=C=PAr, 202

Effect of complexation
Structural properties of azaphosphirane and its $W(CO)_5$ complex. A density functional study, 369
Electrochemistry
Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)tetrathiafulvalenes, 292
Electronic effects
Electronic effects on the acidity of phosphorus(III) triflates, 516
Electron localization function (ELF)
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, 105
Enamides
A practical access to α-phosphonoenamides, 404
Ene-diyne
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, 342
Energy gaps
Structure–property relationships in phosphole oligomers: a theoretical insight, 194
Ene-yne-allenephosphine
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, 342
Enyne silanes
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, 324
EPR spectra
One-pot dodecanitration of Zn(II) and Ni(II) *meso*-tetrakis-(2,6-dichlorophenyl) porphyrin, and extreme redox properties of the obtained complexes, 522
Estrogen
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, 350

Fischer carbene complexes
A facile and diastereoselective access to substituted cyclopentanones from Fischer alkenyl carbene complexes and 1-amino-1-azadienes, 363
Fluorescence
Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, 89
Fluorinated
Synthesis and structure of a highly fluorinated 7-bora-7*H*-benzo[*de*]anthracene, 164
Fluorophosphites
The phosphorofluoroamidite approach to mixed phosphites, 490
Fluorous synthesis
New highly fluorinated dirhodium(II) tetrakis(alkanecarboxylates) as catalysts for carbenoid C–H insertion reactions, 174

Gallium
The unusual reaction of $Ga(C_5Me_5)_3$ with a nucleophilic carbene, 487
Gallium complexes
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, 53
Germaoxetanes
The first stable 3,1-germaphosphaallene Tip(*t*-Bu)Ge=C=PAr, 202
Germaphosphaallene
The first stable 3,1-germaphosphaallene Tip(*t*-Bu)Ge=C=PAr, 202
Gold
A dimeric gold(I) triphospholyl complex, 357
Gold(I) complexes
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, 313
Green chemistry
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, 125

Hafnium imido complexes
Hafnium imido complexes containing silyl ligands, 431
Halides
Synthesis and structure of monomeric and solvent-free $LPrX_2$ compounds supported by a new β-diketiminato ligand [$L = Et_2NCH_2CH_2NC(Me)CHC(Me)NCH_2CH_2NEt_2$, $X = Cl$, Br, BH_4], 47
Hemilabile ligands
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, 237
Heteroaromatic ligands
Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, 424
Heterobimetallic complexes
Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, 231
Heterocycle
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, 494
Hexacoordinated phosphorus
Diastereoselective synthesis of C_2-symmetric hexacoordinated phosphate anions (HYPHATs) with predetermined chirality from 1,2-diaryl-ethane-1,2-diols, 392
HR MAS NMR
Palladium cross-coupling reactions on solid support using a new silylated linker, 512
Hybrid ligands
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, 181
Hybrid material
Organic–inorganic hybrid materials containing metal phosphine complexes: Evidence for preferential *cis* configuration of Pd(II) and Pt(II) complexes within the materials, 453
Hydrazones
A facile and diastereoselective access to substituted cyclopentanones from Fischer alkenyl carbene complexes and 1-amino-1-azadienes, 363

Hydride
The unusual reaction of $Ga(C_5Me_5)_3$ with a nucleophilic carbene, 487
Hydride complex
Tris(*N*-pyrrolyl)phosphine complexes of osmium(II) and osmium(0), 168
Hydridocarbonylchromates
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of $[PPN]^+[CH_3CH(COOEt)Cr(CO)_5]^-$, 27
Hydroamination reaction
Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, 4
Hydroesterification
Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, 12
Hydroformylation
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, 98
Site-selective phosphorylation of arylphospholes through reaction with phosphorus tribromide, 32
Hydrogen bonding
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, 313
Hydrolysis
Organic–inorganic hybrid materials containing metal phosphine complexes: Evidence for preferential *cis* configuration of Pd(II) and Pt(II) complexes within the materials, 453
Hydrosilylation
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, 98
Hypervalent
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), 441
Hypophosphite ester
A novel and convenient preparation of hypophosphite esters, 154

Imino-phosphine
Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, 4
Interannular rotation
Structure–property relationships in phosphole oligomers: a theoretical insight, 194
Intramolecular 1,3-carbanionic rearrangement
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, 237
Iron
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, 125
Iron complexes
Synthesis, structure and reactivity of highly functionalized arsanyl- and stibanyl-diazomethanes, 81
Iron metal
A practical access to α-phosphonoenamides, 404
Isocyanide
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)iminomethanes via possible generation of (amino)(boryl)carbene species, 508
Isomerization
The $Cl_2(PCy_3)(IMes)Ru(=CHPh)$ catalyst: olefin metathesis versus olefin isomerization, 247

Kabachnik–Fields reaction
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, 381
Kinetics
Mechanism of the oxidative addition of Pd^0 complexes generated from $Pd^0(dba)_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, 416

Lactone
Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, 12
Lanthanide
Synthesis and structure of monomeric and solvent-free $LPrX_2$ compounds supported by a new β-diketiminato ligand [$L = Et_2NCH_2CH_2NC(Me)CHC(Me)NCH_2CH_2NEt_2$, $X = Cl$, Br, BH_4], 47
Lewis acid
Synthesis and structure of a highly fluorinated 7-bora-7*H*-benzo[*de*]anthracene, 164
Lewis acid–base complexes
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, 53
Lewis bases
Donor–acceptor interactions with electrophilic terminal phosphinidene complexes, 223
Ligand
A dimeric gold(I) triphospholyl complex, 357
Lithium
The stable silylene $Si[(NCH_2^tBu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[LiSi(SiMe_3)_3(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], 272
Lithium alkyl
Unusual structures of lithium terphenyl derivatives, 461
Lithium aryl
Unusual structures of lithium terphenyl derivatives, 461
Luminescence
Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, 89

Magnetic properties
Aromaticity of annulated benzene, pyridine and phosphabenzene, 39
MCF7
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, 350
Metal binding properties
Density functional studies on N-fused porphyrin. Electronic, magnetic and metal binding properties, 265
Metal carbonyl complexes
Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)tetrathiafulvalenes, 292
Metal carbonyls
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, 181
Metal complex fragments
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = $1,2\text{-}(Ph_2P)_2C_2H_4$), 468
Metallacycle
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, 331

Metallamacrocycle
Design, synthesis and solid state structural characterisation of a metallacyclophane formed by a diazadioxamacrocycle bearing two pyridines and silver(I) cation, 376
Metallocenes
Synthesis of dimetallic μ-alkylideneamido zirconocene dications by a thermodynamically favorable lithium chloride elimination pathway, 61
Metallododeca nitroporphyrins
One-pot dodecanitration of Zn(II) and Ni(II) *meso*-tetrakis-(2,6-dichlorophenyl) porphyrin, and extreme redox properties of the obtained complexes, 522
Metal–metal bonds
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, 181
Metal migration
A facile and diastereoselective access to substituted cyclopentanones from Fischer alkenyl carbene complexes and 1-amino-1-azadienes, 363
Metathesis
The $Cl_2(PCy_3)(IMes)Ru(=CHPh)$ catalyst: olefin metathesis versus olefin isomerization, 247
Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, 231
σ-Metathesis reaction
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = 1,2-$(Ph_2P)_2C_2H_4$), 468
Metathesis reactions
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, 324
Michael addition
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, 381
Mills–Nixon effect
Aromaticity of annulated benzene, pyridine and phosphabenzene, 39
Mixed-valent compounds
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, 68

Nanoparticles
Synthesis and characterization of monodisperse zinc and zinc oxide nanoparticles from the organometallic precursor $[Zn(C_6H_{11})_2]$, 307
Naphthalene derivatives
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, 68
Neighbouring-group effects
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, 68
N-fused porphyrin
Density functional studies on N-fused porphyrin. Electronic, magnetic and metal binding properties, 265
Nickel
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, 331
Nitrile compounds
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile, isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, 214
Nitro substituents
One-pot dodecanitration of Zn(II) and Ni(II) *meso*-tetrakis-(2,6-dichlorophenyl) porphyrin, and extreme redox properties of the obtained complexes, 522
NMR
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), 441
NMR spectra
A dimeric gold(I) triphospholyl complex, 357
Nucleotides
The phosphorofluoroamidite approach to mixed phosphites, 490

Olefin complexes
Coordinated olefins, $H_2C{=}CHR$, and phosphanes, PH_2R: a theoretical study of the R substituent effect, 285
Organic synthesis
A novel and convenient preparation of hypophosphite esters, 154
Organometallic precursor
Synthesis and characterization of monodisperse zinc and zinc oxide nanoparticles from the organometallic precursor $[Zn(C_6H_{11})_2]$, 307
Osmium
Tris(*N*-pyrrolyl)phosphine complexes of osmium(II) and osmium(0), 168
Oxidative addition
Mechanism of the oxidative addition of Pd^0 complexes generated from $Pd^0(dba)_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, 416
Oxygen quenching
Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, 89

Pacman porphyrins
Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, 89
Palladium
Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, 12
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, 19
Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, 136
Mechanism of the oxidative addition of Pd^0 complexes generated from $Pd^0(dba)_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, 416
Palladium cross-coupling reactions on solid support using a new silylated linker, 512
Pentacoordinate
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), 441
Pentacoordinate silicon species
Synthesis and structure of the first pentacoordinate thiasiliranides, 504
Pentacoordinate thiasiliranide
Synthesis and structure of the first pentacoordinate thiasiliranides, 504
Pentamethylcyclopentadienyl
The unusual reaction of $Ga(C_5Me_5)_3$ with a nucleophilic carbene, 487
Phosphaalkynes
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, 409

Synthesis of alkaline earth metal bis(2-phosphaethynolates), 189
Phosphaallene
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, 342
Phosphane complexes
Coordinated olefins, H_2C=CHR, and phosphanes, PH_2R: a theoretical study of the R substituent effect, 285
Phosphides
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = 1,2-$(Ph_2P)_2C_2H_4$), 468
Phosphine–borane complexes
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, 237
Phosphine ligands
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile, isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, 214
Phosphines
Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)tetrathiafulvalenes, 292
Synthesis of dendrimers with phosphine end groups at each generation, 112
Phosphinic acid
A novel and convenient preparation of hypophosphite esters, 154
Phosphinidene complexes
Donor–acceptor interactions with electrophilic terminal phosphinidene complexes, 223
Phosphinoalkyne
Palladium(II) ion promoted hydroamination of di(phenylethynyl)-phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, 4
Phosphinopeptides
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, 381
Phosphites
The phosphorofluoroamidite approach to mixed phosphites, 490
Phosphole
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, 494
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, 19
Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, 136
Mechanism of the oxidative addition of Pd^0 complexes generated from $Pd^0(dba)_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, 416
Phosphole oligomers
Structure–property relationships in phosphole oligomers: a theoretical insight, 194
Phospholyl
The first mixed cyclooctatetraenyl-phospholyl metal complexes. Crystal structure of $[U(\eta\text{-}C_8H_8)(\eta\text{-}C_4Me_4P)(BH_4)(OC_4H_8)]$, 209
Phosphonates
A practical access to α-phosphonoenamides, 404
Phosphorus
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, 253
Phosphorus heterocycles
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, 181
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, 68
Phosphorus(III) triflates
Electronic effects on the acidity of phosphorus(III) triflates, 516
Phosphorus ylides
Phosphorus stabilized carbenes: theoretical predictions, 278
Phosphorylation
Site-selective phosphorylation of arylphospholes through reaction with phosphorus tribromide, 32
Photocycloaddition
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, 324
Platinum
Coordinated olefins, H_2C=CHR, and phosphanes, PH_2R: a theoretical study of the R substituent effect, 285
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, 19
Polarized phosphaalkene
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, 105
Predetermination of configuration
Diastereoselective synthesis of C_2-symmetric hexacoordinated phosphate anions (HYPHATs) with predetermined chirality from 1,2-diaryl-ethane-1,2-diols, 392
Proliferative effect
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, 350
P-stereogenic *o*-phosphinophenols
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, 237
Pyridine
Design, synthesis and solid state structural characterisation of a metallacyclophane formed by a diazadioxamacrocycle bearing two pyridines and silver(I) cation, 376

Quinoxaline
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)iminomethanes via possible generation of (amino)(boryl)carbene species, 508

Radical anion
One-pot dodecanitration of Zn(II) and Ni(II) *meso*-tetrakis-(2,6-dichlorophenyl) porphyrin, and extreme redox properties of the obtained complexes, 522
Rearrangement
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, 342
Reduction
A practical access to α-phosphonoenamides, 404
Rhenium clusters
A series of soluble, discrete homo and heteroleptic Ca(II) complexes of hexanuclear sulfidochloride rhenium clusters, $[Ca(X)_n(Y)_m][Re_6S_6Cl_8]$, ($n = 6$, $m = 0$, X = DMF, THF, DMSO; $n = 4$, $m = 3$, X = MeCN, Y = THF, dioxane) and the 1D co-ordination polymer $[Ca(MeCN)_3(OH_2)_2(dioxane)_2][Re_6S_6Cl_8]\cdot(dioxane)(MeCN)$, 301
Rhodium complexes
New highly fluorinated dirhodium(II) tetrakis(alkanecarboxylates) as catalysts for carbenoid C–H insertion reactions, 174
Ring formation
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, 253

Ring opening
Structural properties of azaphosphirane and its $W(CO)_5$ complex. A density functional study, 369
Ru–arene complexes
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile, isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, 214
Ruthenium
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, 494
Convenient access to an alkenyl(biscarbene)-bridged heterobinuclear (Ru–W) complex. X-ray structure of $[(\eta^6\text{-}C_6Me_4H_2)Ru{=}C(OMe)(CH{=}CHC_6H_4CH{=}CH{-}CO_2Me)(Cl)(PMe_3)][PF_6]$, 498
The $Cl_2(PCy_3)(IMes)Ru(=CHPh)$ catalyst: olefin metathesis versus olefin isomerization, 247
Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, 231
Ruthenium, X-ray crystallography
Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, 136
RX structures
Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, 89

Selectivity
Site-selective phosphorylation of arylphospholes through reaction with phosphorus tribromide, 32
Self-assembly
Design, synthesis and solid state structural characterisation of a metallacyclophane formed by a diazadioxamacrocycle bearing two pyridines and silver(I) cation, 376
SERM
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, 350
Sila-3-bicyclo[3.2.0]heptanes
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, 324
Silver
Design, synthesis and solid state structural characterisation of a metallacyclophane formed by a diazadioxamacrocycle bearing two pyridines and silver(I) cation, 376
Silylated linker
Palladium cross-coupling reactions on solid support using a new silylated linker, 512
Silylborane
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)-iminomethanes via possible generation of (amino)(boryl)-carbene species, 508
Silyl ligands
Hafnium imido complexes containing silyl ligands, 431
Silyl migration
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)-iminomethanes via possible generation of (amino)(boryl)-carbene species, 508
Sisyls
The stable silylene $Si[(NCH^tBu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[LiSi(SiMe_3)_3(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], 272
Sodium acetylides
A general convenient synthesis of conjugated dieneynes, 501
Sol-gel
Organic–inorganic hybrid materials containing metal phosphine complexes: Evidence for preferential *cis* configuration of Pd(II) and Pt(II) complexes within the materials, 453
Spirophosphorane
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), 441
Stable phosphinocarbenes
Phosphorus stabilized carbenes: theoretical predictions, 278
Staudinger reaction
Synthesis of dendrimers with phosphine end groups at each generation, 112
Stereoselective [4 + 2]-cycloadditions
Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, 424
Strained molecules
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, 68
Sulfoxides
Reactivity of the lithium anion of the (*S*,*S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, 130

Tamoxifen
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, 350
Terpenes
Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, 12
Terphenyl
Unusual structures of lithium terphenyl derivatives, 461
Tertiary phosphine complexes
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, 313
Tetrathiafulvalene
Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)tetrathiafulvalenes, 292
Thermolysis
Hafnium imido complexes containing silyl ligands, 431
Synthesis, structure, and reactivity of disilanes containing one neutral [4 + 2]-coordinate silicon center, 479
Thiolate complexes
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, 313
Thiophosphates
A general convenient synthesis of conjugated dieneynes, 501
Three-membered ring
Synthesis and structure of the first pentacoordinate thiasiliranides, 504
Three-membered rings
Structural properties of azaphosphirane and its $W(CO)_5$ complex. A density functional study, 369
Titanocen
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, 350
Titanocene
Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, 231
Transition metal
Organic–inorganic hybrid materials containing metal phosphine complexes: Evidence for preferential *cis* configuration of Pd(II) and Pt(II) complexes within the materials, 453

Transition metal catalyst
Synthesis, structure, and reactivity of disilanes containing one neutral [4 + 2]-coordinate silicon center, 479
Trimethylchlorosilane
The phosphorofluoroamidite approach to mixed phosphites, 490
Triphospholyl
A dimeric gold(I) triphospholyl complex, 357
Triple bonds
Synthesis of alkaline earth metal bis(2-phosphaethynolates), 189
Tris(*N*-pyrrolyl)phosphine complex
Tris(*N*-pyrrolyl)phosphine complexes of osmium(II) and osmium(0), 168
Tungsten
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, 253
Convenient access to an alkenyl(biscarbene)-bridged heterobinuclear (Ru–W) complex. X-ray structure of $[(\eta^6\text{-}C_6Me_4H_2)Ru{=}C(OMe)(CH{=}CHC_6H_4CH{=}CH{-}CO_2Me)(Cl)(PMe_3)][PF_6]$, 498

Uranium
The first mixed cyclooctatetraenyl-phospholyl metal complexes. Crystal structure of $[U(\eta\text{-}C_8H_8)(\eta\text{-}C_4Me_4P)(BH_4)(OC_4H_8)]$, 209

Vertical ionization energies
Structure–property relationships in phosphole oligomers: a theoretical insight, 194
Vinylarsine
Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, 136

Water
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, 125
X-ray analysis
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), 441
X-ray crystallographic analysis
Synthesis and structure of the first pentacoordinate thiasiliranides, 504
X-ray crystallography
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, 53
X-ray crystal structure
Tris(*N*-pyrrolyl)phosphine complexes of osmium(II) and osmium(0), 168
X-ray structure
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of $[PPN]^+[CH_3CH(COOEt)\text{-}Cr(CO)_5]^-$, 27

Ynephosphine
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, 342

Zinc
Synthesis and characterization of monodisperse zinc and zinc oxide nanoparticles from the organometallic precursor $[Zn(C_6H_{11})_2]$, 307
Zinc oxide
Synthesis and characterization of monodisperse zinc and zinc oxide nanoparticles from the organometallic precursor $[Zn(C_6H_{11})_2]$, 307
Zirconocene cation complexes
Synthesis of dimetallic μ-alkylideneamido zirconocene dications by a thermodynamically favorable lithium chloride elimination pathway, 61